

PS



THIS IS **PART 1**
OF 3 IN A SERIES
ON AMMUNITION
IN DEPLOYMENT
SITUATIONS.

**ACTION.
ADVENTURE.
MAINTENANCE.**

Handle And Transport Ammo WITH CARE

FIRE!

SOMETHING'S
WRONG WITH
THE AMMO!

WE
CAN'T
FIRE!

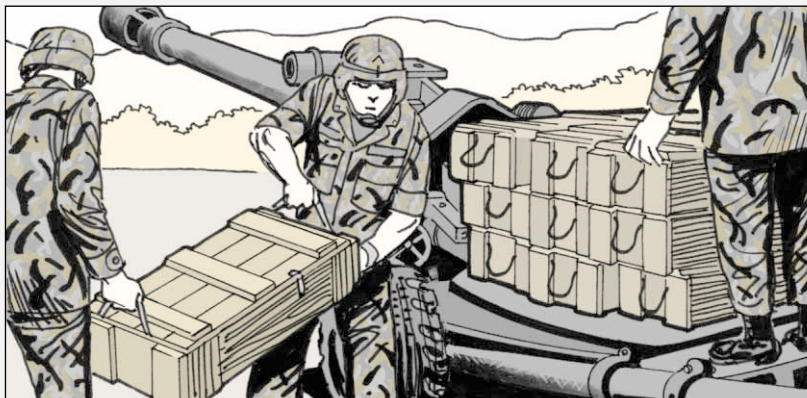
WHEN IT'S TIME TO
DEPLOY, YOU WANT TO
MAKE SURE ALL YOUR
EQUIPMENT IS
UP-TO-SNUFF.

BUT ALL THE PM IN
THE WORLD **WON'T**
HELP YOUR WEAPON IF
YOU **HAVEN'T** TAKEN
CARE OF ITS AMMO.

TO MAKE SURE
YOUR AMMUNITION
WORKS AGAINST
THE ENEMY AND
NOT YOU, TAKE
A SHOT AT THE
FOLLOWING
INFORMATION.



Safe Operations



During deployment, you'll encounter many different types of ammunition. The single most important fact to remember is: **Ammunition is intended to maim, kill and destroy!** If you are not completely sure about an item, **do not go near it, do not touch it, and do not pick it up!** There are plenty of examples of overly curious soldiers who ended up either wounded or killed, so handle ammunition carefully.



Limit the number of soldiers exposed to ammunition handling to the minimum necessary to get the job done.



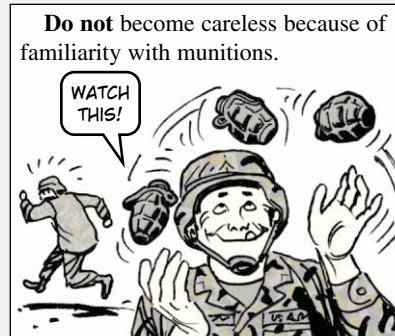
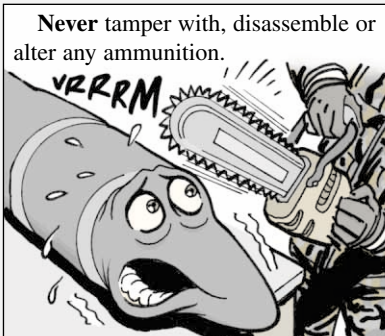
Protect ammunition from dirt and sand, temperature extremes, moisture, grease, rough handling or anything else that might cause it to deteriorate.



Keep ammunition in its original containers as long as possible to prevent exposure to the elements. Maintain accountability and preserve lot integrity.

Open ammunition boxes carefully. Return all inner packaging material to the container and close it to keep out moisture, sand or debris. Repack items that have been opened and not used.

Make sure proper fire extinguishers are on-hand and properly maintained. In the event of a fire, try to keep it from spreading to ammunition. If the fire does reach ammunition, **evacuate immediately!**



Make sure you are properly grounded when handling ammunition items containing electric primers, exposed propellant or exposed explosive material. Static electricity and ammunition can be a lethal combination!

Ammunition that does not arm or has failed to explode after being armed is classified as a dud. **Dud ordnance poses an immediate threat!** It should not be handled or moved. Mark the location and call your local EOD support unit to remove or destroy it. You should also contact your EOD support unit if you locate unexploded ordnance.

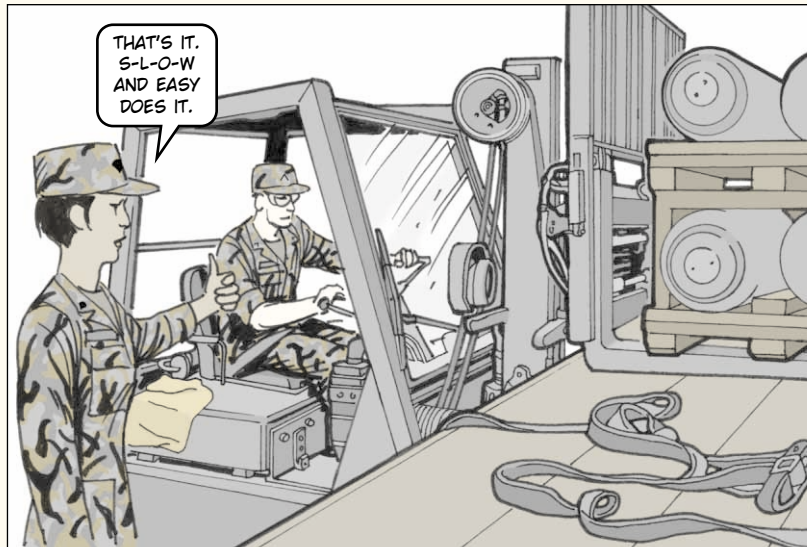
The greatest danger posed by depleted uranium (DU) munitions is the explosive hazard. The depleted uranium is radioactive, but the levels are so low that the main health risk is chemical toxicity. So follow these tips when dealing with DU munitions:

— In the event of a fire involving DU munitions, evacuate **upwind** and immediately notify your unit's NBC NCO and Safety Officer for instructions and assistance.

— If possible, place damaged DU munitions in plastic bags to contain any potential contamination. Turn them in at your ammunition supply point (ASP).

When in doubt as to the condition and proper care of ammunition, refer to DA Pam 385-64, *Ammunition and Explosives Safety Standards*, and FM 4-30.13, *Ammunition Handbook: Tactics, Techniques, and Procedures for Munitions Handlers*. Or, get in touch with a Quality Assurance Specialist (Ammunition Surveillance), or “QASAS”. A QASAS may be contacted through your ASP, range safety, or EOD personnel. You can also check with personnel from your ammunition supply organization or logistics staff element.

Loading and Unloading



Loading and unloading ammunition requires special care. Before loading, be certain all pallets, boxes and containers are in good shape, sealed tight and secured.

Maintain a tight pack using approved packing material. Brace or restrain the load as firmly as possible to prevent pallets and boxes from shifting in transit, and to protect them from bumps along the way.

Load vehicles in accordance with AMC 19-48 series drawings using wooden dunnage or web straps. The QASAS will be able to get these drawings, or you can check them out on-line at:

<http://www.dac.army.mil/DET/>

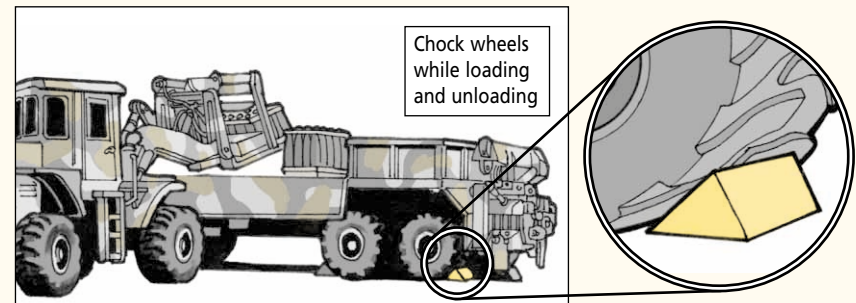
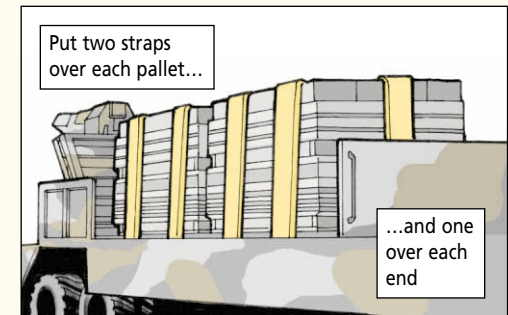
Never rely on the tarp alone to restrain ammunition in an open vehicle and never use boxes of ammunition as dunnage to block and brace your load. Remember, the ammunition load will need to be restrained both fore and aft as well as side-to-side.

A good rule of thumb when using web straps to restrain the load is to put two straps over each pallet or bundled group of boxes and one over each end of the load.

Unless you're involved in an actual battle scenario, do not load high explosive and white phosphorous or other chemical ammunition on the same vehicle. Check with your QASAS for approved transportation compatibility.

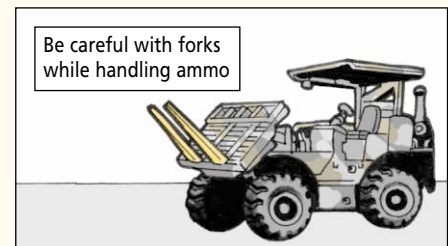
Know your vehicle's load limit and never exceed it. The weight of the ammunition will usually be listed on the side of the containers.

During loading or unloading, set the brake, turn off the engine and chock the wheels. Properly distribute the weight and secure the load to prevent movement during transport.



When loading unpalletized ammunition, do not allow more than one-third of the height of any box to extend above the vehicle sidewalls.

When handling palletized ammunition, a forklift is the best equipment to lift and move ammunition short distances. Do not strike the ammunition with the forks. When using larger forklifts, do not stick the forks all the way through the pallet or you may puncture or topple neighboring pallets.



After you have moved the pallet away from those nearby, slide the forks forward until the pallet is seated against the mast. When you're ready to move the load, keep the forks no higher than a foot off the ground to keep the pallet stable.

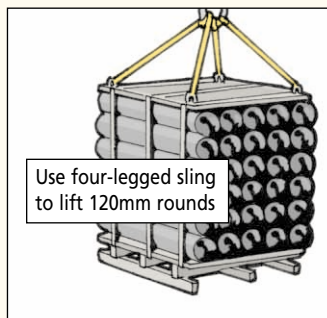
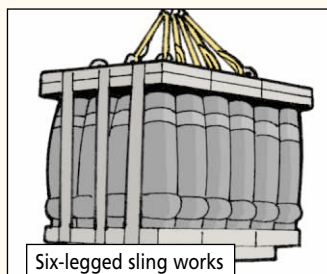
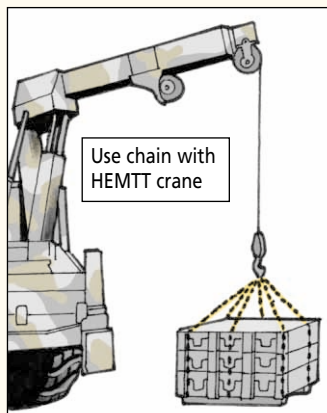
If a forklift won't do the job or isn't available, use a crane such as the one on the M977 HEMTT and a chain sling, NSN 3940-01-209-6008. Loop the two chains under opposite sides of the pallet and hook them to the two hooks on the chain sling ring.

For best results, hook the length of chain so it makes an angle of 45 to 60 degrees with the top of the pallet. If you hook the chain too long, you might not be able to lift the pallet high enough to position the load on the truck or trailer. Hooking the chain too short will create added pressure on the top edge of the containers and may damage them.

Although you can lift pallet units of separate loading projectiles with the chain sling, a specially designed six-legged sling, NSN 3940-01-241-7400, is the best way to go. It lets you lift three pallets of 155mm projectiles at one time. Since 155mm projectiles usually come banded together in bundles of three pallets, leave them that way for ease of handling.

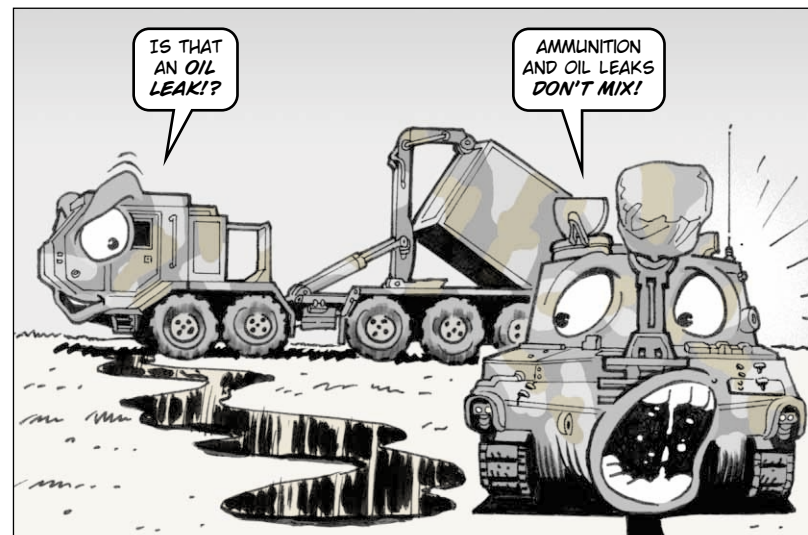
Before lifting wooden pallets, make sure the banding is not broken or missing. If you're lifting the metal field artillery projectile pallet (FAPP), make sure the top locking handles are seated firmly in place.

The six-legged sling's legs are too short to lift 120mm tank ammunition pallets. Since these pallets have four lifting rings attached to the metal top adapter of the pallet unit, use the four-legged sling, NSN 1398-01-348-4670. You'll need to order the sling on DD Form 1348-6 and put "NSN not on AMDF" in the REMARKS block. Just make sure all banding is present and tight on 120mm pallets.



YOU CAN ALSO USE THE FOUR-LEGGED SLING TO LIFT PALLETIZED PROJECTILES, BUT YOU CAN ONLY LIFT TWO PALLETS OF 155MM PROJECTILES AT A TIME.

Motor Vehicle Movement

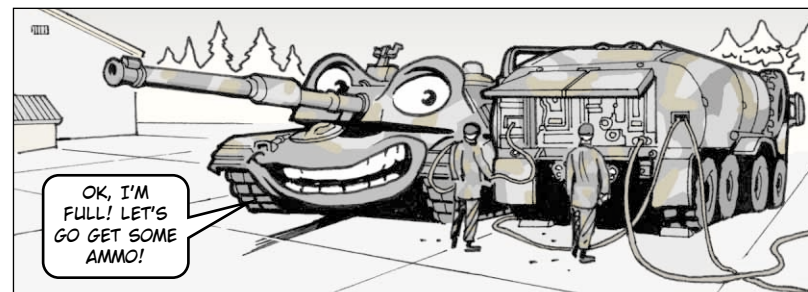


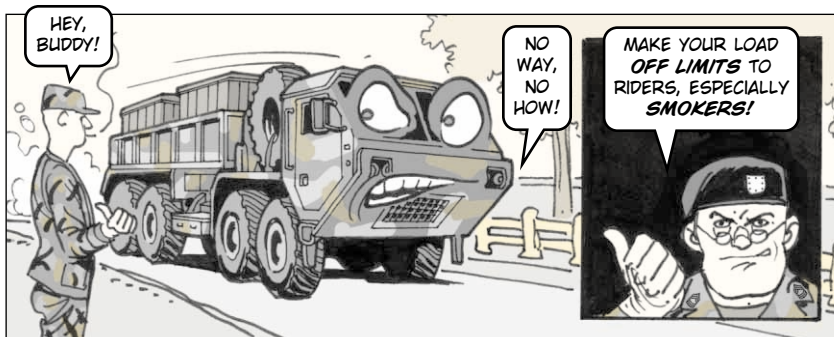
Any vehicle used to haul ammunition, or one that even goes near ammunition, must be in proper working condition. The vehicle must be clean and free of leaking fuel, grease, or anything else that could create a fire hazard.

Crew-level maintenance may be performed on a vehicle loaded with ammunition without unloading the ammunition. Higher-level maintenance and maintenance involving heat or flame-

producing devices require that the ammunition be off-loaded and moved at least 50 feet from the operation.

Fuel your vehicle **before** you load it with ammunition. If you must refuel a loaded vehicle, do so in an isolated area. When tactical situations permit, refueling a loaded vehicle should be delayed until the engine has cooled for at least 10 minutes to lessen the danger of fire from spills or overflows.





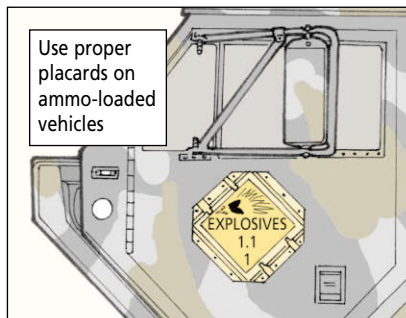
Vehicles carrying ammunition must be equipped with two serviceable fire extinguishers, rated 10BC or higher. Fire extinguishers rated 1A,10BC are even better, since they also handle paper and wood fires.

Maintain proper convoy distances when moving trucks loaded with ammunition. When parked or stopped, maintain a distance of at least 10 meters between loaded trucks. This will not keep a fire from spreading from one truck to another, but it will allow maneuvering room in the event of fire.

Maintain 10-meter distance between loaded trucks



The required checklist for all trucks carrying ammunition is DD Form 626, *Motor Vehicle Inspection*. DD Form 836, *Shipping Paper and Emergency Response Information for Hazardous Materials Transported by Government Vehicles*, provides special instructions for motor vehicle drivers. Placard ammunition-loaded motor vehicles per DA Pam 385-64; TM 38-410, *Storing and Handling of Hazardous Materials*; and all local or national requirements.

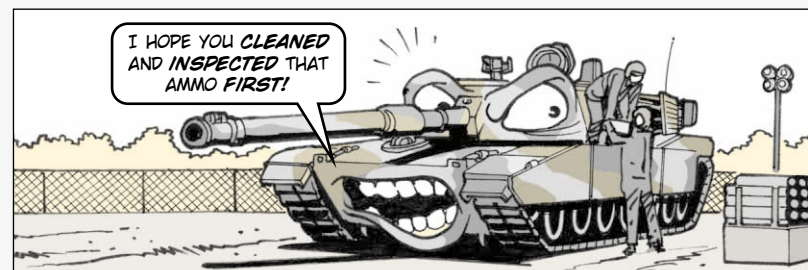


YOU'RE NOT THE ONLY ONE WHO NEEDS TO KNOW WHAT YOU'RE CARRYING!



NOV 02

Combat Vehicle Ammunition



Check small arms ammunition stored in your combat vehicle regularly for contamination with dirt, grit or debris. Keep the ammunition wiped clean, but do not attempt to use oil, solvents, water or steel wool. Be especially careful that ammunition doesn't get coated with oil or grease.

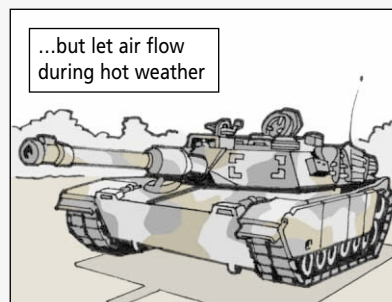
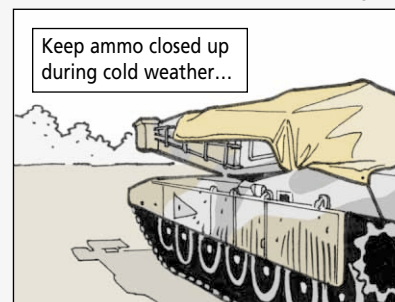
It's the same story for larger ammunition stored in your combat vehicle. Check your local SOP on unloading larger ammunition for a thorough cleaning and inspection.

When you clean, paint, grease, oil or wash inside your vehicle, either remove the ammunition or take measures to protect it. Seal the vehicle tight when you hose down the outside. Remove ammunition from floor storage on M2/M3-series Bradleys before washing.

Remove ammunition from all vehicles before taking them to the motor pool or other facility for maintenance.

Post a fire plan for evacuation of combat-loaded vehicles in the parking area. The fire plan for uploaded combat vehicles will include provisions for a quarterly fire drill for crews.

In cold weather, keep ammunition compartments closed as much as possible to keep down condensation. During hot weather, open ammo compartments to allow as much ventilation as possible. See your vehicle's -10 TM and your weapon's pubs for more information on maintaining ammunition stored in combat vehicles.



PS 600

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Airlifting Ammunition



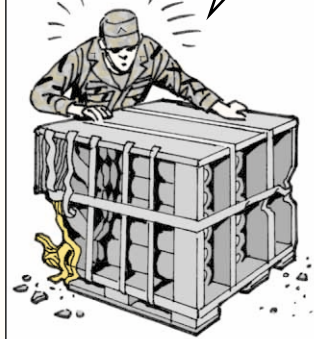
MOVING AN INTERNAL LOAD BY HELICOPTER PRESENTS DIFFERENT PROBLEMS.

DURING LOADING AND UNLOADING, THE HELICOPTER MUST...

- ✧ Be properly grounded.
- ✧ Have its rotors secured.
- ✧ Have all switches turned off.
- ✧ Be loaded away from the ammunition storage area.

Make sure all boxes and containers are tightly sealed, clearly marked and in good shape with no leaks or burst seams. Load and secure the ammunition according to the aircraft commander's SOP.

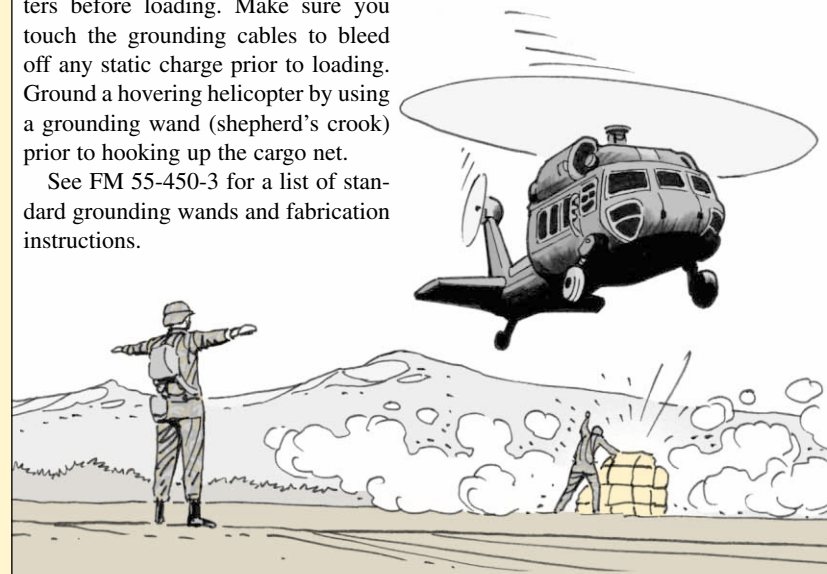
WHOA! I DON'T THINK THIS AMMO IS GOING ANYWHERE!



For sling-out operations:

- ✧ Locate helicopter sling-out areas at least 550 meters from ammunition storage structures, inhabited buildings, or other vital facilities.
- ✧ Consider prevailing winds in the sling-out site selection. Select a site that helicopters could normally approach and depart without flying over magazines, inhabited buildings, personnel areas or other vital facilities. Provide a windsock or other wind direction indicator so pilots can determine the current wind direction.
- ✧ The sling-out area must have a good earthen ground. Ground helicopters before loading. Make sure you touch the grounding cables to bleed off any static charge prior to loading. Ground a hovering helicopter by using a grounding wand (shepherd's crook) prior to hooking up the cargo net.

See FM 55-450-3 for a list of standard grounding wands and fabrication instructions.



- ✧ Never use the sling-out area for long-term storage of ammunition. The only ammunition that should be present is the load the last helicopter just left or the load the next helicopter is about to pick up.

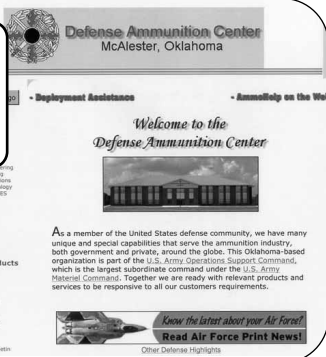
- ✧ If possible, the loads should be assembled in cargo nets, ready to be slung out, prior to the arrival of the helicopter.

FOR MORE INFORMATION ON LOAD LIMITS, SAFETY, GROUNDING AND AMMUNITION COMPATIBILITY, SEE TM 38-250, PREPARING HAZARDOUS MATERIALS FOR MILITARY AIR SHIPMENT, AND DA PAM 385-64.



More Help

THE U.S. ARMY
DEFENSE AMMUNITION
CENTER (DAC) MAINTAINS
USEFUL AMMUNITION
SUPPORT INFORMATION
ON ITS WEB SITE.

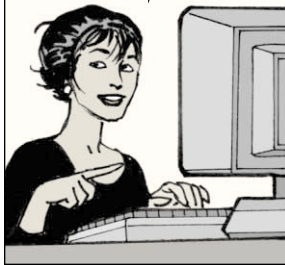


AN ON-LINE 24-HOUR
AMMUNITION HELP
SYSTEM (AMMOHELP)
ALLOWS ANYONE WITH
AN OFFICIAL NEED TO
SUBMIT QUESTIONS
REGARDING MUNITIONS,
EXPLOSIVES,
LOGISTICS, QUALITY,
SAFETY, SECURITY,
TRAINING, EQUIPMENT,
OR TECHNOLOGY.



- **DAC Home Page:**
www.dac.army.mil/
- **AmmoHelp web site:**
www.dac.army.mil/ammohelp/
- **AmmoHelp e-mail:**
ammohelp@dac.army.mil
- **AmmoHelp toll-free hotline:**
1-877-668-2840

THE AMMOHELP
HOTLINE IS MANNED
DURING OFFICE
HOURS. BUT YOU'LL
NEED TO LEAVE A
VOICEMAIL MESSAGE
AT OTHER TIMES.



COME BACK
NEXT MONTH
WHEN WE
DISCUSS
AMMUNITION
STORAGE!